

**REMARKS**

Claim 1 has been amended based on the disclosure in Figs. 6 and 7 and at pages 26-27 of the specification.

Entry of the above amendment is respectfully requested.

**Rejections under 35 U.S.C. 112**

On page 2 of the Office Action, in paragraph 3, claims 1-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Also, on page 3 of the Office Action, in paragraph 4, claims 1-9 are rejected under 35 U.S.C. 112, first paragraph, because the specification does not reasonably provide enablement for the invention as recited in the amended claims. Further, on page 4 of the Office Action, in paragraph 5, claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite.

In response to these rejections, Applicants have amended claim 1 and canceled claim 9. In this regard, Applicants submit that the upper concentration of iridium complex compound of 4 wt% in the amended claim 1 is readable from Fig. 7. The present application discloses devices having a concentration of iridium complex within the range set forth in the amended claim 1 and, of those devices, one has a normalized half-life period of more than 3000 hours when calculated with respect to an initial luminance of 100 cd/m<sup>2</sup> as shown in Figs. 6 and 7.

In view of the above, Applicants submit that the present claims satisfy the requirements of 35 U.S.C. 112, first and second paragraphs. Accordingly, reconsideration and withdrawal of these rejections is respectfully requested.

### **Anticipation Rejection of Claim 9**

On page 5 of the Office Action, in paragraph 6, claim 9 is rejected under 35 U.S.C. 102(b) as anticipated by Baldo et al. in *Appl. Phys. Lett.* 75(1) pp. 4-6 (July 5, 1999).

In response, Applicants have canceled claim 9 to obviate this rejection. Accordingly, withdrawal of this rejection is respectfully requested.

### **Obviousness Rejection of Claims 1-3 and 7-9**

On page 6 of the Office Action, in paragraph 7, claims 1-3 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldo et al. in *Appl. Phys. Lett.* 75(1), pp. 4-6 (July 5, 1999) in view of Tsutsui et al. in *Jpn. J. Appl. Phys.* 38, pp. L1502-L1504 (December 15, 1999).

In response to this rejection, Applicants submit initially that there is no disclosure of an EL device in Tsutsui et al exhibiting a normalized half-life period of more than 3000 hours as recited in the amended claims.

Further, Applicants note that Baldo et al. does not disclose the luminance half-life period of the device, as stated by the Examiner. Although the Examiner expects that Baldo's device having 6% Ir(ppy)<sup>3</sup> in the carbazole compound CBP is capable of exhibiting a luminance half-life period of greater than 4000 hours, Applicants submit that the Examiner's position is incorrect. As shown in Figs. 6 and 7 of the present specification, the 6% Ir(ppy)<sup>3</sup> concentration does not satisfy such luminance half-life period of greater than 3000 hours.

Thus, Applicants submit that the present invention is not obvious over Baldo in view of Tsutsui, and withdrawal of this rejection is respectfully requested.

**Obviousness Rejection of Claim 4**

On page 8 of the Office Action, in paragraph 8, claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baldo et al. in view of Tsutsui et al. as applied to claims 1-3 and 7-9 above, and further in view of JP 200021572.

In response to this rejection, Applicants submit that JP 200021572 does not make up for the deficiencies in Baldo and Tsutsui as discussed above, so the present invention is not obvious over Baldo in view of Tsutsui and further in view of JP 200021572. Accordingly, withdrawal of this rejection is respectfully requested.

**Obviousness Rejection of Claims 5 and 6**

On page 9 of the Office Action, in paragraph 9, claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldo et al. in view of Tsutsui et al. as applied to claims 1-3 and 7-9 above, and further in view of Mori et al. (US 5,281,489) or applicants' allegedly admitted prior art.

In response to this rejection, Applicants submit that Mori and Applicants' allegedly admitted prior art do not make up for the deficiencies in Baldo and Tsutsui as discussed above, so the present invention is not obvious over Baldo in view of Tsutsui and further in view of Mori or the allegedly admitted prior art. Accordingly, withdrawal of this rejection is respectfully requested.

### **Obviousness Rejection of Claims 1-9**

On page 10 of the Office Action, in paragraph 10, claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosokawa (US 2002/0045061 A1).

In response to this rejection, Applicants note that Hosokawa does not disclose any specific examples of devices meeting the limitations of amended claim 1 regarding the concentration of the iridium complex compound and the luminance half-life period, as stated by the Examiner. Applicants submit that it is difficult for a person of ordinary skill in the art to determine suitable and optimum amounts of iridium complexes and carbazole derivatives to be used in combination in the light emitting layer. This is because Hosokawa's device examples include devices having a half-life of as long as only a mere 800 hours at an initial luminance of 500 cd/m<sup>2</sup>. Applicants submit that it cannot be expected by a person of ordinary skill in the art that a normalized half-life greater than 3000 hours at an initial luminance  $L_0=100$  is obtained even if determined at an unspecified lower initial luminance value.

Thus, Applicants submit that the invention as recited in the amended claims is not obvious over Hosokawa. Accordingly, withdrawal of this rejection is respectfully requested.

### **Conclusion**

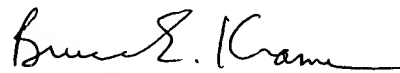
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. Application No.: 09/844,679

Attorney Docket No.: Q64172

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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